PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 3: WO 85/ 00746 (11) International Publication Number: A61K 7/15, 47/00 Al (43) International Publication Date: 28 February 1985 (28.02.85) (21) International Application Number: LU (European patent), NL (European patent), NO, PCT/US84/01307 SE (European patent). (22) International Filing Date: 15 August 1984 (15.08.84) Published (31) Priority Application Number:

523,003

(32) Priority Dute:

15 August 1983 (15.08.83)

(33) Priority Country:

US

(71)(72) Applicant and Inventor: TUTSKY, Ronald, J. [US/ US]; P.O. Box 1646, Greenwich, CT 06836 (US).

(74) Agents: LEZDEY, John et al.; 1510 Two Penn Center Plaza, Philadelphia, PA 19102 (US).

(81) Designated States: AT (European patent), AU, BE (European patent), BR, CH (European patent), DE (European patent), DK, FI, FR (European patent), GB (European patent), JP, LU (European patent), NL (European patent),

With international search report.

Equivalent to Tutsky, U.S. Patent No. 4,525,344, Issued June 25,1985

(54) Title: SKIN CARE AND SHAVING COMPOSITION

(57) Abstract

A combination skin care and shaving composition which essentially contains a phospholipid, wheat germ oil and vitamin E that prevent pseudo folliculitis.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

•	AT	Austra	GA	Gabon	MR	Mauritania
	ΑŪ	Australia	GB	United Kingdom	MW	Malawi
	BB	Barba fos	HU	Hungary	NL	Netherlands
	BΕ	Belgium	IT	Italy	NO	Norway
	BG	Bulgarin	JP	Japan	RO	Romania
	BR	Brazil	KP	Democratic People's Republic	SĎ	Sudan
	CF	Central African Republic		of Kares	8E	Sweden
	cc	Congo	KR	Republic of Korea	BN	Senegal
	CH	Switzerland	LI	Liechtensteln	SU	Soviet Union
	CM	Cameroon	LK	Sri Lenka	TD	Chad
	DE	Germany, Federal Republic of	LU	Luxembourg	TG	Togo
١.	DD	** · · · · · · · · · · · · · · · · · ·	MC	Monaco	US	colonma lo estus besiny
\	שמ	Denmark	MG	Madagascar		
	PR	France	ML	Mail	•	

PCT/US84/01307

-1SKIN CARE AND SHAVING COMPOSITION Field of the Invention

The present invention relates to novel skin conditioning compositions which can be utilized as shaving preparations. More particularly, the present invention relates to a shaving preparation which can be utilized with or without soap and water, and which provides the skin with a protective coating so as to avoid nicks during shaving. Additionally, the invention relates to novel shaving compositions which avoids pseudo folliculitis.

Description of the Prior Art

The treatment of human skin with various agents has been undertaken for many years with the goal being to keep the skin in a smooth supple condition. Skin has the tendency to dry out when exposed to conditions of low humidity or to extended periods in detergent. These considerations have never been taken to mind when shaving preparations are proposed.

Sagarin, Cosmetics, Science and Technology, 2nd Edition, Vol. 1, Wiley Interscience (1972) has been recommended for applications for the skin. There is disclosed some of the ingredients of the current invention but not in the critical combination or for use as a preparation.

Shaving lotions have generally been prepared with regard to the hair follicles only so as to prepare a beard for cutting by a razor. Silicone products have been introduced in order that a razor may travel more easily on the skin without nicking. None of the products provide any beneficial features to the skin. In fact, most commercial products contain ingredients which cause denaturization or other harmful effects. Shaving preparations containing detergents or soap products or one of such deleterious products, are commonly utilized today. It is only after the shaving process that any concern is made for conditioning the skin.



PCT/US84/01307

- 2 -

Summary of the Invention

It is an object of the present invention to provide a skin care preparation.

It is a further object of the present invention to provide a skin care preparation which can be utilized as a shaving composition.

It is a yet still further object of the invention to provide a shaving composition and method which helps to avoid pseudo folliculitis.

Another object of the invention is to provide a shaving composition which not only facilitates shaving but provides beneficial effects to the skin whether or not shaving is required.

Yet another object of the present invention is to provide a shaving preparation which simultaneously conditions the skin, prepares the hair follicles for shaving and provides an effective barrier so as to permit the razor to glide across the skin without causing nicks.

A still further object of the invention is to provide a skin care preparation which provides beneficial effects to the skin when utilized in a stem room or sauna and permits shaving without utilizing any soap or water.

These and other objectives of the invention are obtained by utilizing a skin conditioning and beard conditioning composition which contains a combination of ingredients wherein some ingredients penetrate into the skin, some ingredients penetrate and set up the beard and other ingredients which act on the skin surface as a moisturizing agent and permit a razor to glide across the skin surface during a shaving process without nicking so as to produce a close shave.

As essential ingredients of the present invention there are included phospholipids, wheat germ oil and vitamin E. Optionally, there is also included jojoba oil. The essential ingredients are admixed with seed and plant or

PCT/US84/01307

- 3 -

vegetable oils into a blend for a particular use. Advantageously, a composition according to the invention contains about 5-20% by weight of total composition of phospholipid; about 2-15% by weight of total composition of wheat germ oil; 0.5-5% by weight of total composition of vitamin E and the remainder being a mixture of see and plant or vegetable oils. Jojoba oil in an amount of up to 15% by weight may also be added to improve the shaving performance.

Detailed Description of the Invention

The present invention can be broadly defined as a skin conditioning composition having properties which can be utilized in a shaving process. The composition comprises:

- A. About 5-20% by weight of total composition of phospholipid;
- B. About 2-15% by weight of total composition of wheat germ oil;
- C. About 0.5-5% by weight of total composition of vitamin E, and
- D. A mixture of seed and vegetable oils which preferably includes jojoba oil of up to about 15% by weight of the mixture.

In a preferred embodiment, the phospholipid is present in an amount of 5-10% by weight of the mixture, the wheat germ oil is present in an amount of 5-10% by weight of the mixture, vitamin E is present in an amount of 0.5-2% of the mixture, jojoba oil is present in an amount of 2-5% by weight of the mixture and the remainder being a combination of seed and vegetable oils. However, mink oil and lanolin oils have also been found to be advantageous in the composition.

Preferred phospholipids for use in the present invention are those which comprise non-saturated fatty acid chains and at least one non-saturated bond. Examples of these non-saturated acids are oleic acid, linoleic acid or linolenic acid. Representative phospholipids of this preferred class are



PCT/US84/01307

- 4 -

the phosphatidylcholines of which one of the fatty acyl group is from a non-saturated fatty acid.

More generally, reference can be made for the selection of adequate phospholipids to <u>Phosphatidylcholines-Biochemical</u> and Clinical Aspects of Essential Phospholipids by H. Peeters, Springer Verlag, Berlin-Heidelberg - New York, 1976, which is incorporated herein by reference. Particularly suitable is lecithin which has been found to provide a moisturizing barrier and the above-skin protective barrier necessary in the shaving process, especially in combination with wheat germ oil and vitamin E.

Among the seed oils which may be utilized there are included peanut oil, almond oil, safflower oil, cotton seed oil, sesame seed oil, kukui oil, castor oil, sunflower seed oil, avocado oil, apricot oil, soy oil, coconut oil, cocoa butter, and the like.

Among the plant or vegetable oils which may be utilized may be mentioned olive oil, corn oil, aloe oil, jojoba oil, eucalyptus oil, green tea extract, oils from mango, papaya, guava and passion fruit, and the like.

Other ingredients which may be added include lanolin, lanolin oil, mink oil and turtle oil. Preferably, the compositions contain only natural products.

As a preservative it is preferred to utilize natural products such as thyme oil or benzoin extract from plants.

Some of the ingredients which have been found to be entirely absorbed by the hair and skin are safflower oil, sunflower seed oil, coconut oil, olive oil, soy oil, kukui oil, castor oil and mink oil (light).

Some of the ingredients which partially penetrate the hair and skin are sesame oil, cocoa butter (greater penetration when warm), peanut oil, heavy mink oil, wheat germ oil, cotton seed oil, avocado oil and jojoba.

The phospholipids (lecithin) primarily remains on the skin surface to form a barrier which is essential in the shaving process. Wheat germ oil, jojoba oil and aloe extracts

4 65 00746

PCT/US84/01307

- 5 -

The hair and skin but the majority remain on the skin outface.

Organic herb extracts may also be included in the imposition in order to aid in soothing hurting skin. These extracts which are primarily absorbed include fennel extract, extract, balm mint extract, mistletoe extract, yarrow extract, ginseng oil, and the like, in amounts depending on the the composition is primarily for shaving or skin care.

The use of more than one seed and plant or vegetable is preferred to obtain a cosolvent effect and a difference absorption rates between the skin and hair.

An advantage of the composition of the present invention are that they are primarily intended to be incaqueous so that the composition have a longer shelf-life do not necessarily require use of preservatives or incomposition, although some of the ingredients have these meets.

The invention is believed to operate in the shaving cross as follows:

The penetrating oils and portions of other ingredients at sorbed by the skin and hair. Due to the fact that hair less or a barrier area, there is greater and more rapid respection than by the skin. In the absorption process, the wide in and between the skin cells are filled. Because of the difference in absorption rates between the hair and skin, the said is more quickly set up without oversoftening the skin. The non-penetrating ingredients then provide the glide barrier such permits a quick and highly effective close shave. As a model of the absorption by the beard, the hair follicles are intened so that if they curve around there is no penetration the skin to cause pseudo folliculities or as commonly silled, "razor bumps".

In a wet shave, that is, one wherein water is an state ingredient, the skin plumps up greater than with the state of the invention so that after evaporation of the water



- 6 -

there is a stubble showing as a result of the recession of the skin. Also, the hair is not softened so that curving over of the stubble causes penetration by course hairs, into the skin layer with the result being razor bumps.

The ingredients of the present invention form a long lasting protective barrier by utilizing the barrier properties in and on the skin in a synergistic manner. Thus, the benefits from the composition are greater than one would expect from the individual components. These benefits remain even after shaving. The benefits are even more realized when the party utilizing the composition is in a sauna or steam room since the heat liquifies some of the heavier components and causes their penetration into the skin. The heat also solubilizes some of the waxes and fats by some of the oils and permits absorption into the skin to increase skin conditioning benefits.

Specific examples embodying this invention follow and are not meant to be limiting.

Example 1

The following formulation was made and gave a close shave and skin conditioning:

Ingredient	Percent by Weight
Lecithin	5.0
Wheat germ oil	4.0
Vitamin E	1.0
Jojoba oil	2.0
Sesame oil	18.5
Aloe extract	0.5
Kukui oil	6.8
Almond oil	0.8
Cocoa butter	0.4
Castor oil	2.2
Cotton seed oil	12.0
Peanut oil	BUREAU

41.00746

PCT/US84/01307

~ 7 **~**

Olive oil	9.0
Corn oil	10.3
Lanolin	2.0

In the above formulation, lecithin may be replaced by other phospholipid.

The above formula was tested and found to prevent bumps by those individuals having a tendency to develop bumps as a result of shaving.

Example 2

The following skin conditioning and shaving conditioning and shaving condition was made and permitted a close shave without the condition was made and permitted a close shave without the conditioning and shaving

Ingredient	Percent	bу	Weight
Vitamin E		5	
Lecithin	1	. 2	
Wheat germ oil		8	
Jojoba oil		6	
Corn oil		6	
Almond oil		5	
Safflower oil		4	
Sunflower seed oil		4	
Peanut oil		8	
Avocado oil		5	
Olive oil	1	0	
Coconut oil		6	
Cocoa butter		8	
Aloe		2	,
Lanolin		4	
Kukui oil		1	

The composition is especially effective when utilized sauna or steam room.



PCT/US84/01307

- 8 -

It is understood that although the formulation is intended for use without soap, there are individuals who will still desire to combine the formulation with a soap mixture. In such a case, the formulation would be placed on the face and the soap lather applied without rubbing so as not to remove the protective barrier. The combination with soap will permit better cleaning of the razor while shaving. Advantageously, the formulation and a soap preparation can be combined in a bi-container which can conveniently dispense the two compositions.

Example 3

The following formulation is intended to condition the face after skiing or prolonged exposure to adverse atmospheric conditions:

Percent by Weight
10
2
5
2
· 4
2
2
3
5
2
1
1
1
2
18
20
20
10

"不可以因此多數字》中的數字是如何對於東於數

H.7.6

PCT/US84/01307

- 9 -

Para aminobenzoic acid
Thyme oil 2

The formula also provides a clean comfortable shave



PCT/US84/01307

- 10 -

What is Claimed Is:

- 1. A skin conditioning composition which is effective in a shaving process which comprises about 5-20% by weight of total composition of phospholipid; about 0.5-5% by weight of total composition of vitamin E; about 2-15% by weight of total composition of wheat germ oil and a mixture of seed and vegetable oils.
 - 2. The composition of claim 1 including jojoba oil.
- 3. The composition of claim 1 wherein said phospholipid is lecithin.
- 4. The composition of claim 1 including oils selected from the group consisting of lanolin, mink and turtle oil.
 - 5. The composition of claim 1 which is non-aqueous.
 - 6. The composition of claim 1 including aloe extract.
 - 7. The composition of claim 1 including cocoa butter.
- 8. In a method of shaving, the improvement which comprises applying on the skin area prior to shaving the composition according to claim 1.
- 9. The method according to claim 8 wherein the composition is non-aqueous.
- 10. The method according to claim 8 which includes applying heat.
- 11. The method of claim 8 wherein the composition contains lecithin.

PCT/US84/01307

- 11 -

- 12. A method of preventing pseudo folliculitis which comprises shaving with a composition according to claim 1.
- 13. The method of claim 12 wherein the composition is non-aqueous.
- 14. The method of claim 12 wherein the composition contains lecithin.



INTERNATIONAL SEARCH REPORT

International Application No PCT/US84/01307

	C1. 424/73; 424/365	
II. FIELDS	S SEARCHED	
Classification	Minimum Documentation Searched + On System Classification Symbols	
U. S		·
	Documentation Searched other than Minimum Documentation to the Extent that such Documents are included in the Fields Search	hed 6
III. BOCU	MENTS CONSIDERED TO BE RELEVANT 14	
Category *	Citation of Document, 16 with indication, where appropriate, of the relevant passages	Relevant to Claim No. 18
X	US, A, 4,046,874, published 06 September 1977, See Col. 6, lines 26-37, Gabby et al.	1-7
X	US, A, 4,332,763, published Ol June 1982, See Col. 3, lines 18 to 66, Hempel et al.	1-7
х	FR, A, 1,051,575, published 18 January 1954, See Col. 4, lines 1-17, Fine	1-14
Х	GB, A, 2,095,996, published 13 October 1982, See Col. 4, lines 53-58, Ogiso et al.	1-7
X	GB, A, 2,066,071, published 8 July 1981, See Collines 1-25, Koulbanis et al.	. 3, 1-14
Х	EP, A, 0024161, published 25 February 1981, See Col. 16, lines 1-40, Turney et al.	1-14
X	N, Cosmetics and Toiletries, issued April 1980, Vol. 95, G. S. Kass, Creams and Lotions Formulary/Moisturizing, See page 108	1-14
"A" doccord	cument defining the general state of the art which is not insidered to be of particular relevance. Ities document but published on or after the international invention of particular cannot be considered comment which may throw doubts on priority claim(s) or lich is cited to establish the publication date of another ation or other special reason (as specified) cument referring to an oral disclosure, use, exhibition or ments, such combined ments, such combination or the priority date claimed cument published prior to the international filing date but at the priority date claimed	r relevance; the claimed invention o involve an inventive step when the with one or more other such docu- on being obvious to a pareon shilled he asine patent family
	no Actual Completion of the International Search 1 27 September 1984 Date of Mailing of this International Search 2	ational Search Report
Internatio	ISA/US Signature of Authorized Office Dale R. Ore	ear 10

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.